

### REMARKS

Claims 1-2 and 4-13 are currently pending and Claim 4 is hereby amended.

### **Restriction/Election Requirement**

In the Restriction/Election requirement mailed August 18, 2009 ("Restriction Requirement"), the Examiner asserts that the claims are drawn to multiple species and requests selection between the following species:

The species are as follows:

Strains of microorganisms which have:

- a) deletion of one more of the 2 genes coding for at least one of a quinone oxidoreductase and a soluble transhydrogenase, (pick one);
- b) deletion of one or more of the 6 genes encoding phosphoglucose isomerase, or a phosphofructokinase, or a 6-phosphogluconate dehydratase, or a malate synthase or an isocitrate lyase or an isocitrate dehydrogenase kinase/phosphatase (pick one);
- c) modification of one or more of the 2 genes encoding at least one of a dihydrolipoamide dehydrogenase and a glyceraldehyde 3-phosphate dehydrogenase so as to cause it to utilize NADP preferentially (pick one),
- d) overexpressed one or more of the 5 genes coding for a glucose 6-phosphate dehydrogenase or a 6-phosphogluconolactonase, or a 6-phosphogluconate dehydrogenase, or an isocitrate dehydrogenase or a membrane transhydrogenase (pick one),
- e) wherein the microorganism is selected from one of 15 following strains: *Aspergillus sp.*, *Bacillus sp.*, *Brevibacterium sp.*, *Clostridium sp.*, *Corynebacterium sp.*, *Escherichia sp.*, *Gluconobacter sp.*, *Penicillium sp.*, *Pichia sp.*, *Pseudomonas sp.*, *Rhodococcus sp.*, *Saccharomyces sp.*, *Streptomyces sp.*, *Xanthomonas sp.* and *Candida sp.* (pick one), and

f) wherein the strain is used in the method of claim 12 to produce one of the following 8 substances of interest that is an amino acid, or a vitamin, a sterol, a flavonoid, a fatty acid, an organic acid, a polyol, or a hydroester (pick one).

Applicants hereby elect with traverse the following:

- a) Deletion of the quinine oxidoreductase;
- b) Deletion of the phosphoglucose isomerase;
- c) Modification of the gene coding for dihydrolipoamide dehydrogenase;
- d) Overexpression of the glucose 6-phosphate dehydrogenase;
- e) The Strain *Escherichia sp.*; and
- f) The substance of interest is an organic acid.

Applicants elect the above-mentioned groups (a) – (f) with traverse. Moreover, at least Claims 1-2, 4-6, and 8-13 are encompassed by the above species election. Applicants specifically reserve the right to re-join nonelected claims and species upon indication of allowable subject matter.

Applicants disagree with the Examiner's species election requirement and assertion that the species "are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1." Restriction Requirement at page 2. For example, the general inventive concept in common with all of the restricted species may be limiting "NADPH-oxidizing activities" by either deletion or modification of a gene or set of genes. As such, the modification or deletion of a gene or set of genes forms a basis by which the restricted species share a common feature. Accordingly, the lack of unity requirement is improper and Applicants respectfully request withdrawal.

Applicants believe that no additional fees are due with the filing of this Response. If any additional fees are required, they may be charged to Deposit Account No. 50-4254, referencing Attorney Docket No. 2912956-027000.

Respectfully submitted,

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Inventor(s): Bestel-Corre *et al.*  
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